Table of Contents

HOLOGRAPHIC AND COHERENT OPTIC TECHNIQUES

CREATING HOLOGRAPHIC FILTERS FOR AUTOMATIC RECOGNITION SYSTEMS
James T. Thomasson 3

HOLOGRAPHIC INFORMATION STORAGE SYSTEMS FOR CONSUMER CREDIT DATA
Kent K. Sutherlin and Edmund H. Christy, Jr. 13

PATTERN RECOGNITION TECHNIQUES - I

PSYCHOPICTORICS AND PATTERN RECOGNITION
Dr. Bernice Sacks Lipkin 25

PATTERN RECOGNITION AND CLASSIFICATION: AN INFORMATION THEORY APPROACH
Dr. Aaron N. Silver 41

OBTAINING 3-D GEOMETRIC DESCRIPTIONS OF POLYHEDRA FROM SETS OF THEIR PERSPECTIVE PROJECTIONS
Andrew D. Rabinowitz 55

SOME APPROACHES TOWARD SCENE EXTRACTION
R. H. Cofer, Jr. and J. T. Tou 63

PATTERN RECOGNITION TECHNIQUES - II

GEOMETRICAL FEATURE EXTRACTION AND DYNAMIC PROCESSES
Gabriel E. Lowitz 83

A NUMERICAL TECHNIQUE OF DATA RETRIEVAL FROM MOIRE OR PHOTOELASTIC PATTERNS
Cesar A. Sciammarella 91

PHOTOGRAPHIC TECHNIQUES FOR THE STUDY OF TRAFFIC FLOW
Zaven Tashjian and Stanley E. Charles 103

UNASSISTED ANALYSIS OF BUBBLE CHAMBER EVENTS
Howard S. White and Dennis E. Hall 113

DIFFRACTION-PATTERN SAMPLING FOR AUTOMATIC PATTERN RECOGNITION
George G. Lendaris and Gordon L. Stanley 127

BIOMEDICAL OPTICAL TECHNIQUES

SECOND REPORT ON THE CHROMOSOME SCANNING PROGRAM AT THE LAWRENCE RADIATION LABORATORY
Stuart P. Stone, James L. Littlepage and Bruce R. Clegg 157

THE COMPUTERIZATION OF HIGH SPEED CINEANGIOCARDIOGRAPHIC LEFT VENTRICULAR VOLUME DETERMINATION
Edwin S. Beckenbach and Dr. Donald T. Desilets 173

COMPUTER-ASSISTED MICRODENSITOMETRY OF BONE
Richard Moore and Robert S. Ledley 193

PANEL DISCUSSION

PATTERN RECOGNITION -- Where Are We? 205

ATTENDEES

. 221